



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,218	10/16/2006	Kimberley Hank	3192.00004	4947
7590		10/23/2009	EXAMINER	
Kenneth I Kohn Kohn & Associates 30500 Northwestern Highway Suite 410 Farmington Hills, MI 48334			SILVER, DAVID	
			ART UNIT	PAPER NUMBER
			2128	
			MAIL DATE	DELIVERY MODE
			10/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,218	Applicant(s) HANKE, KIMBERLEY
	Examiner DAVID SILVER	Art Unit 2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 12 August 2009.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-4,6-17 and 19-22 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-4,6-17 and 19-22 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 24 March 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

1. The Instant Office Action is in response to a Request for Continued Examination filed 8/12/09.
2. Claims 1-22 were originally presented for examination.
3. Claims 1-4, 6-17, 19-22 are currently pending in Instant Application.

Response to Arguments

Response: 35 U.S.C. § 101

4. **Applicants argue:**

4.1 "The claims (specifically independent claims 1 and 20) have been amended to further reflect the presence of the hardware elements of the present invention, specifically visual display hardware and communication hardware. Respondent points to Paragraph [0019] of the present application's specification, which refers directly to the system of the present invention including "... a web and/or encrypted satellite and/or server interface and/or existing system..." Furthermore, the specification refers to "... a variety of viewing equipment types including, but not limited to on-board computer (i.e. ONSTAR.TM.), PDAs, phones (both cell and land line), touch screen monitors, and viewable glasses."- all of which are visual display hardware elements present in the present invention. In light of the amended claims which reflect the specification's reference to various hardware elements, reconsideration of the rejection is respectfully requested." (Remarks: page 6)
5. **Examiner Response:**

5.1 The manipulation "device" / means that is claimed is drawn to software, in view of PGPUB para 0015: "The manipulating device is preferably software that is capable of rendering a three-dimensional image of the object and manipulating the object." Nothing in the claim reflects the above-cited "viewing equipment types" such as monitors, or touch screen glasses. In fact, the Applicant-quoted section refers to a "website [that] includes a variety of viewing equipment types ...". It is unclear how this citation is relevant to the claim, as the claim does not discuss, or even remotely relate to viewing a website. Further still, the claims are not resolved of their 35 U.S.C. § 101 deficiency and remain drawn to software, *per se*. All of the "means for" terms are drawn to software elements.

Art Unit: 2128

Applicants have not provided support in the Specification, or amended the claim to overcome the rejection. Accordingly, the rejection is maintained.

Response: 35 U.S.C. § 102

6. **Applicants argue:**

6.1 At best, Applicants' position is that the reference's disclosed simulating is not drawn to the claimed virtual manipulation, testing, and controlling of the three-dimensional and related data.

7. **Examiner Response:**

7.1 Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. For example, how is simulation different from virtual manipulation? How is an operator that is using a simulated (non-real) reactor and the 3D data associated (and displayed) therewith, not identical to manipulation, testing (of both the trainee, the reactor, and simulator), etc?

Claim Objections

8. Claim 19 is objected to because of the following informalities: lack of antecedent basis for "the three-dimensional models" It appears to refer to "three-dimensional [and related] data". Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

MPEP 2106.01.I reads as follows:

9. Claims 1-4, 6-17, 19-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

9.1 In this instance, absent an explicit and deliberate definition in the specification that the product includes an appropriate medium or hardware elements, the claims are directed to software, *per se*. Note exemplary claim 1 which recites only software elements. Additionally, software, *per se*, is not

considered concrete (MPEP 2106). The "means for" is actually software, as demonstrated by claim 2.

In claim 6, some of the elements are merely abstract concepts, such as the Internet, and do not provide structure. For example, modem has structure associated therewith; however, the Internet does not, and neither does "wireless connections". As the communications means can be drawn to both statutory and non-statutory matter, the claim is broad enough to be considered as non-statutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-4, 6, 17, 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Gregg (**US 4977529**).

Gregg discloses: 1. An automated three-dimensional and related data access, display, and communication system, said system comprising manipulating means for virtually manipulating the three-dimensional and related data (**col: 184 line: 23-38; col: 185 line: 39-61**);

testing means for performing virtual tests upon three-dimensional and related data (**col: 3 line: 64 to col: 4 line: 5; col: 53 line: 48-53: As cited above, the reactor is displayed as a 3D visualization. The tests are performed on the simulated nuclear reactor, and accordingly on the underlying reactor data, which is demonstrated as 3D visualization to the operator / trainee.**),

controlling means for controlling the system's operation (**col: 3 line: 64 to col: 4 line: 5**), displaying means for visually presenting three-dimensional and related data (**col: 184 line: 23-38**), and

communication means for transmitting and receiving three-dimensional and related data (**col: 184 line: 23-38 ... the display and operator inputs**).

Gregg discloses: 2. The system according to claim 1, wherein said manipulating means is software (**Fig 8**

Art Unit: 2128

and description).

Gregg discloses: 3. The system according to claim 1, wherein said three-dimensional and related data include objects (**col: 184 line: 23-38; col: 185 line: 39-61**).

Gregg discloses: 4. The system according to claim 3, wherein said objects are selected from the group consisting essentially of physical objects, virtual objects, holographic objects, and photogramic objects (**col: 184 line: 23-38; col: 185 line: 39-61**).

Gregg discloses: 6. The system according to claim 5, wherein said communication means is selected from the group consisting essentially of phone lines, modem, TI line, Internet, DSL, cable modem, dial-up Internet, wide area network, Intranet, local area network, ISDN, wireless connections, satellite communications, direct cable connection, and T3 communications (**Fig 89/1 and 89/6 and descriptions**).

Gregg discloses: 17. The system according to claim 1, wherein said displaying means includes viewing means for viewing assembly and disassembly of products, components, and structures (**col: 184 line: 23-38; col: 185 line: 39-61**).

Gregg discloses: 19. The system according to claim 1, wherein the three-dimensional models include multi-dimensional data (**col: 184 line: 23-38; col: 185 line: 39-61**).

As per claims 20, note the rejection of claim 1 above. The Instant Claims recite substantially same limitations as the above-rejected claim and are therefore rejected under same prior-art teachings.

Gregg discloses: 21. The system according to claim 20, wherein said system further includes deploying means for deploying data relative to an accident or attack (**Fig 89/1 and 89/6 and descriptions; the elements of "relative to an accident or attack" do not further limit the claim. Specifically, the data amounts to non-functional matter, and absent an new and nonobvious implementation to the substrate is not given patentable weight.**).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102

Art Unit: 2128

of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gregg (**US 4977529**) as applied to claim 1 above, and further in view of Scott (**US 4,480,480**).

As per claim 7, Gregg fully discloses parent claim 2. Gregg however does not expressly disclose (although hints at, in (**col: 11 line: 23-32**)) that said manipulating means includes a device for estimating accident damage and structural integrity. Scott however discloses an analogous invention having the said feature (**Fig 22-27 and their descriptions**).

In view of the KSR v. Teleflex Supreme Court ruling, it is asserted that one of ordinary skill in the art could have combined the elements as claimed by known methods and that in combination, each element merely would have performed the same function as it did separately. Furthermore, one of ordinary skill in the art would have recognized that the results of the combination were predictable. Specifically, when damage occurs, one would want to estimate the damage as well as assess the results of the damage (including costs of repair, and whether repairs are required - based on structural integrity).

See MPEP 2145 [R-6], X, B, "[A] person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely that product [was] not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103." KSR International Co. v. Teleflex Inc., 550 U.S. ___, ___, 82 USPQ2d 1385, 1397 (2007).

12. Claims 8-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gregg (**US 4977529**) as applied to claim 1 above, and further in view of Scott (**US 4,480,480**), and further in view of Uegaki (**US 20020161533**)

As per claim 8, the combination of Gregg and Scott discloses: 8. The system according to claim 7, further including predicting means for predicting damage caused during an accident (**col: 19 line: 9-16**). The combination however does not expressly disclose determining means for determining costs for repairing parts damaged during the accident. Uegaki however discloses an analogous system having the said feature (**para 2, 8, 13**).

In view of the KSR v. Teleflex Supreme Court ruling, it is asserted that one of ordinary skill in the art could have combined the elements as claimed by known methods and that in combination, each element merely would have performed the same function as it did separately. Furthermore, one of ordinary skill in the art would have recognized that the results of the combination were predictable. Specifically, when damage occurs, one would want to estimate the damage as well as assess the results of the damage (including costs of repair, and whether repairs are required - based on structural integrity).

See MPEP 2145 [R-6], X, B, " [A] person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely that product [was] not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103." KSR International Co. v. Teleflex Inc., 550 U.S. ___, ___, 82 USPQ2d 1385, 1397 (2007).

Uegaki discloses: 9. The system according to claim 8, wherein said predicting means includes warning indicia that indicate parts that are destroyed as a result of the accident (**para 12, 15: when parts are replaced**).

Uegaki discloses: 10. The system according to claim 8, wherein said predicting means includes cautionary indicia that indicate parts that potentially have lost structural integrity as a result of the accident (**para 64**).

Uegaki discloses: 11. The system according to claim 8, wherein said predicting means includes approving indicia that indicate parts that have no damage as a result of the accident (**para 64: the parts that are not listed are inherently indicated as not being damaged**).

Art Unit: 2128

Uegaki discloses: 12. The system according to claim 8, wherein said determining means includes software that analyzes the predicted damage and converts the damage into the cost for repairing the damage **(para 66).**

Uegaki discloses: 13. The system according to claim 8, further including ordering means for ordering the damaged parts **(para 51 (user)).**

Uegaki discloses: 14. The system according to claim 8, further including an accompanying tool list for use in repairing the parts **(para 66).**

Uegaki discloses: 15. The system according to claim 10, wherein said predicting means includes cautionary indicia that indicate parts that potentially have lost structural integrity as a result of potential failures **(para 64-66).**

Uegaki discloses: 16. The system according to claim 10, wherein said predicting means includes cautionary indicia that indicate parts that potentially have lost structural integrity as a result of nature **(para 64-66).**

13. Claims 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gregg (**US 4977529**) as applied to claim 1 above, and further in view of Wilson (**US 6,670,908**)

As per claim 22, Gregg fully discloses claim 21. Gregg however does not expressly disclose that said system further includes automatic analysis and notification means for notifying relevant regional authorities based on severity, type of event, and potential area and population affects. Wilson however discloses an analogous invention having the said feature **(col: 4 line: 63-67).**

In view of the KSR v. Teleflex Supreme Court ruling, it is asserted that one of ordinary skill in the art could have combined the elements as claimed by known methods and that in combination, each element merely would have performed the same function as it did separately. Furthermore, one of ordinary skill in the art would have recognized that the results of the combination were predictable. Specifically, when the damage occurs, one would want to know the affected entities. In the case of natural causes / power plant damages, the entities are the surrounding population. Accordingly, it would have been obvious to

Art Unit: 2128

also notify the authorities such that help may be sent to where it is needed.

See MPEP 2145 [R-6], X, B, " [A] person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely that product [was] not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103." KSR International Co. v. Teleflex Inc., 550 U.S. ___, ___, 82 USPQ2d 1385, 1397 (2007).

Support for Amendments and Newly Added Claims

Applicants are respectfully requested, in the event of an amendment to claims or submission of new claims, that such claims and their limitations be directly mapped to the specification, which provides support for the subject matter. This will assist in expediting compact prosecution. MPEP 714.02 recites: "Applicant should also specifically point out the support for any amendments made to the disclosure. See MPEP § 2163.06. An amendment which does not comply with the provisions of 37 CFR 1.121(b), (c), (d), and (h) may be held not fully responsive. See MPEP § 714." **Amendments not pointing to specific support in the disclosure may be deemed as not complying with provisions of 37 C.F.R. 1.131(b), (c), (d), and (h) and therefore held not fully responsive.** Generic statements such as "Applicants believe no new matter has been introduced" may be deemed insufficient.

Conclusion

14. All claims are rejected.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Silver whose telephone number is (571) 272-8634. The examiner can normally be reached on Monday thru Friday, 10am to 6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application

Art Unit: 2128

Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/ David Silver /
David Silver, Patent Examiner
Art Unit 2128